

## Claims

1. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body, the terminal  
5 having a main body and a sub-body adapted to slide along the longitudinal direction of the main body to be opened/closed, the driving apparatus comprising:

a first magnetic body module positioned on the rear surface of the sub-body and having a magnetic body  
10 fastened thereon, which has a predetermined polarity and which extends along the longitudinal direction thereof, and

a second magnetic body module positioned on the front surface of the main body and having a magnetic  
15 body fastened thereon, which has a predetermined polarity and faces the magnetic body of the first magnetic body module.

2. A driving apparatus of a sliding-type portable  
20 wireless terminal using a magnetic body as claimed in claim 1, wherein the magnetic body of the first magnetic body module has a polarity, in both ends thereof, which exerts a drawing force in relation to the magnetic body of the second magnetic body module and another polarity,  
25 in the central portion thereof, which exerts a repulsive force in relation to the magnetic body of the second magnetic body module.

3. A driving apparatus of a sliding-type portable  
30 wireless terminal using a magnetic body as claimed in claim 1, wherein the first magnetic body module has a first base plate fastened on the rear surface of the sub-body, a pair of sliding guides fastened on a surface

of the base plate and extending along the longitudinal direction of the first base plate, and the magnetic body fastened on a surface of the first base plate.

5           4. A driving apparatus of a sliding-type portable  
wireless terminal using a magnetic body as claimed in  
claim 3, wherein the second magnetic body module has a  
second base plate adapted to face the first base plate  
and sliding grooves formed on a surface of the second  
10 base plate to be engaged with the sliding guides for  
sliding, and the magnetic body of the second magnetic  
body module is fastened on a surface of the second base  
plate and faces the magnetic body of the first magnetic  
body module, which is fastened on a surface of the first  
15 base plate.

5. A driving apparatus of a sliding-type portable  
wireless terminal using a magnetic body as claimed in  
claim 1, wherein the first magnetic body module includes  
20 three pairs of N and S poles alternated along the  
longitudinal direction thereof and the second magnetic  
body module includes S and N poles so that the sub-body  
can be stopped in first, second, and third positions as  
it slides on the main body.

25  
6. A driving apparatus of a sliding-type portable  
wireless terminal using a magnetic body as claimed in  
claim 5, wherein the main body has first and second  
regions defined in series along the longitudinal  
30 direction thereof in the lower half portion of the front  
surface thereof, and the sub-body is adapted to  
completely cover both the first and second regions when  
stopped in the first position, to expose only the first

region when stopped in the second position, and to expose both the first and second regions when stopped in the third position.

5           7. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 5, wherein the first magnetic body module has first, second, and third magnetic bodies having the polarity of N and S poles and arranged linearly along  
10 the longitudinal direction thereof.

          8. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 5, wherein the main body has a first region  
15 defined in the lower end of its front surface and a second region in the upper end thereof, and the sub-body is adapted to completely cover both the first and second regions when stopped in the first position, to expose the first region when stopped in the second position,  
20 and to expose the second region when stopped in the third position.

          9. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 1, wherein the first and second magnetic body  
25 modules are provided with shield members so that the magnetic force from the magnetic bodies, which are fastened thereon, cannot be discharged out of the driving apparatus.

30

          10. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 9, wherein the first magnetic body module has a

first base plate fastened on the rear surface of the sub-body, the second magnetic body module has a second base plate fastened on the front surface of the main body and coupled to the first base plate in such a manner that it can slide while facing the first base plate, and the shield members are positioned on  
5 respective surfaces of the first and second base plates.

11. A driving apparatus of a sliding-type portable  
10 wireless terminal using a magnetic body as claimed in claim 9, wherein the shield members are made of a material chosen from the group comprising a spring steel plate, an electric zinc-plated steel plate, and a silicon steel plate.

15